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## **P29. ANTIOXIDANT PROPERTIES OF *Russula chloroides*, *Ganoderma adspersum* and *Inonotus hispidus* EXTRACTS AND THEIR EFFECTS ON GLUTATHIONE-S-TRANSFERASE ACTIVITY**

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Medicinal mushrooms show an ideal food nature due to their low sugar and oil content, nutritional value and especially because of being good diet products. Medicinal mushrooms may include functions such as antibacterial, antiparasitic, antifungal, detoxification, hepatoprotective and antidiabetic. Nowadays there is a growing interest in new drugs against secondary metabolites derived from fungi and for the discovery of precursor compounds. These bioactive components are becoming popular sources of natural antioxidant, antitumor, antiviral, antimicrobial and immunomodulatory agents.

In this study, the extracts that were prepared from *Russula chloroides*, *Ganoderma adspersum* and *Inonotus hispidus* species obtained from the Black Sea region, were analyzed for the flavonoids and phenolic compound content. Also their effects on activity and level of enzymes of glutathione-S-transferase (GST), which plays role in cellular oxidative defense and xenobiotic detoxification mechanism were examined. In comparing antioxidant capacities, *I. hispidus* was found to be a better antioxidant than the other two species. The same fungi were also evaluated for their effect on GST activities and among the studies fungi *I. hispidus* was the most efficient activator effect on the GST.

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